

AMENDMENTS TO THE CLAIMS:

Please cancel claims 1-10 without prejudice to or disclaimer of the recited subject matter.

Please add new claims 11-19, as follows.

1-10. (Canceled)

11. (New) An exposure apparatus which has a light source and transfers a pattern of an original to a substrate using light supplied from said light source, said apparatus comprising:

a photoelectric sensor used to control an amount of light to which the substrate is exposed;

a memory storing a first value for correcting an output value of said photoelectric sensor with respect to each accumulated energy of light, having a first power, with which said photoelectric sensor is irradiated;

a calculator which calculates a second value for correcting an output value of said photoelectric sensor corresponding to a second accumulated energy of light, having a second power, with which said photoelectric sensor is irradiated, based on the first value in said memory corresponding to the second accumulated energy, and a ratio of the second power to the first power; and

a correction unit which corrects an output value of said photoelectric sensor using the second value.

12. (New) An apparatus according to claim 11, wherein said light source is a pulse light source.

13. (New) An apparatus according to claim 11, wherein said photoelectric sensor detects a light amount during exposure of the substrate.

14. (New) An apparatus according to claim 11, further comprising a movable stage which holds the substrate, wherein said photoelectric sensor is arranged on said movable stage and detects uniformity of light, supplied from said light source, at said movable stage.

15. (New) A device manufacturing method comprising steps of:
transferring a pattern of an original to a substrate using an exposure apparatus as recited in claim 11; and
developing the substrate to which the pattern has been transferred.

16. (New) An exposure method of transferring a pattern of an original to a substrate using light supplied from a light source, said method comprising steps of:
detecting an amount of light supplied from the light source using a photoelectric sensor used to control an amount of light to which the substrate is exposed;
storing a first value for correcting an output value of the photoelectric sensor in a memory with respect to each accumulated energy of light, having a first power, with which the photoelectric sensor is irradiated;

calculating a second value for correcting an output value of the photoelectric sensor corresponding to a second accumulated energy of light, having a second power, with which the photoelectric sensor is irradiated, based on the first value in the memory corresponding to the second accumulated energy, and a ratio of the second power to the first power; and
correcting an output value of the photoelectric sensor using the second value.

17. (New) A method according to claim 16, wherein the light source is a pulse light source.

18. (New) A method according to claim 16, wherein the photoelectric sensor detects a light amount during exposure of the substrate.

19. (New) A method according to claim 16, wherein the photoelectric sensor is arranged on a movable stage which holds the substrate and detects uniformity of light, supplied from the light source, at the movable stage.